

I. TWO NEW WEST AFRICAN RHOPALOCERA.

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(PLATE IV.)

While recently restudying and labelling the *Papilionidæ* of Africa in our collections, I came across a specimen, which I am unable to refer to any species known to me in nature, or described and figured in any of the literature accessible to me. It comes nearest to *Papilio ucalegonides* Staudinger, of which specimens are before me as I write, but differs from that species, in having the median band of light spots on the fore wing widely interrupted, in not having a large whitish spot at the lower outer angle of the cell of the fore wing, and in having a series of submarginal spots in both fore and hind wings. In addition on the lower side of the wings the markings are much less clearly defined than in *P. ucalegonides*, though the light spots of the upper side reappear faintly on the lower side, including the submarginal spots, and the spots at the base of the hind wings are but two, whereas in *P. ucalegonides*, there are three. The figures I give will enable students to recognize this form. I append a detailed description.

Genus PAPILIO Linnæus.

1. *Papilio weberi* sp. nov. ♂. (Plate IV, figs. 1, 1a.)

Antennæ, palpi, head, thorax, legs, dorsal region and sides of abdomen as far down as the spiracles, black, except that above each spiracle there is a sublunulate yellowish-white spot, with its longer axis running diagonally from below upward and backward. Below this series of spots there is a narrow longitudinal yellow line, running the length of the abdomen, which is succeeded ventrad by a more or less broken longitudinal line of black spots, which are largest upon the anterior segments. The middle of the abdomen on the under side is orange-yellow throughout, save that the first two segments are each marked with a small black annulus or circle on the median line. Minute spots, composed of tufts of white hair-like scales, are located, one below, one in front of, and one behind each eye. The

trochanters of the legs are clothed with white hairs, and thus reveal three white spots on either side of the otherwise black lower side of the thorax. There are also three small white tufts of hairs arranged longitudinally on the last segment of the thorax dorsad the white spot on the last trochanter. *Upper side of wings:* The ground-color of the wings above is brownish-black, darkest on the cell and at the base of the primaries, becoming lighter toward the outer margins, and on the outer half of the secondaries passing into chocolate-brown. The fore wing is ornamented by an interrupted median band of five pale yellow spots, extending from the middle of the inner margin as far as the fifth nervule. Of the spots composing this band the first and the third are relatively narrow, the second and the fourth the largest and suboval, the fifth a mere narrow streak. Beyond the end of the cell near the costa there are two pale yellow subapical spots, which are outwardly bifid, and only half as large as the corresponding spots in the wing of *P. ucalegon* and *P. ucalegonides*. On the hind wings the median band of spots is continued across the wing to the middle of the inner margin, where it is widest. On this wing the band is not interrupted, or broken, and changes in color as it approaches the inner margin from pale yellow to grayish-white. The hind marginal fold is densely clothed with long hairs and androconia. The outer half of the hind wing is chocolate-brown, upon which the black veins stand forth conspicuously, as well as the long black rays which run from the outer margin to the median band at the middle of each interspace. The fringes are concolorous, without any trace of marginal white lunettes, as in some other species of this group. *Under side of wings:* Both wings are much paler below than on the upper side, being pale chocolate-brown, shading at the base of both wings, and on the inner margin of the secondaries into reddish. The spots of the upper side reappear faintly on the lower side, and are not as well-defined as upon the upper surface. The hind wing has two small black spots at the base, one at the origin of the cell pupilled with white, the other at the origin of the precostal vein solidly black. Expanse, as spread, 80 mm. The type, which is unique, was taken in the vicinity of Lolodorf, Cameroon.

I name the species in honor of its discoverer, Rev. H. L. Weber, who in recent years has added many new and interesting species to the African collections of the Carnegie Museum. The type, which is unique, is in the Carnegie Museum.

Genus CHARAXES Ochseneimer.

For a number of years there has been in our collection of African *Charaxes* a female specimen, which I have hesitated to describe, thinking that perhaps it might be the female of a species, the male of which has already been named. As students well know, there is in certain of the species of this interesting genus a great dissimilarity between the two sexes, though there is generally some clue to relationship furnished by the markings of the under side of the wings. Having recently had occasion to go over the material in our possession, in which almost all the known species of the genus are represented, I am led to conclude that I am dealing with an insect which has not been as yet named, and I venture therefore to describe it as new.

I take pleasure in naming this insect in honor of Mrs. Lydia Good, the noble woman who shared with my friend, the late Rev. Dr. A. C. Good, the trials and joys of those years in which he so successfully labored as a missionary and man of science in Africa, where she bore to him the son, who with distinction has taken his father's place.

2. *Charaxes lydiæ* sp. nov. ♀. (Plate IV, figs. 2, 2a.)

The antennæ are black. The palpi are black above, brilliant white below. The front and head are black, with a minute white spot before and behind the insertion of each antenna. The upper side of the thorax is clothed with whitish gray hairs, the upper side of the abdomen is whitish, with the hind edges of the six posterior segments marked with black. The pectus and lower side of the abdomen are white. The legs are white below, black above. *Upper side of wings:* The fore wing at the base is densely clothed with glaucous gray scales as far as the middle of the cell, but through this vestiture the dark markings at the base of the cell on the lower side faintly appear. The end of the cell is deep black, but with a small trapezoidal white spot intervening between the black area and the glaucous gray area at the base. A broad white triangular area, extends upward from the inner three-fourths of the margin to the origin of vein 3, but does not reach the outer angle. The remainder of the wing above and beyond this white area is black, ornamented with conspicuous white spots. At the outer angle is a triangular white spot. Above this spot, between the extremities of veins 2 and 3, there is a lanceolate

spot, with its apex pointing inwardly. Above this, between veins 3 and 4, there are two spots, the outer one large and long, fusiform, the inner small and subtriangular, with its base at the point of origin of vein 4. Between veins 4 and 5, immediately before the end of the cell, is a small suboval spot, which is rounded inwardly, conforming to the course of the lower discocellular vein, and outwardly is less clearly defined. Above vein 5 and a little beyond the last mentioned white spot there is a band of white running inwardly and upwardly to the costa, narrowing from vein 5 as it approaches the costal margin. There are three smaller white spots, forming a subapical band, located on the fifth, sixth, and seventh interspaces. The inner half of the hindwing is white, passing into ochre-yellow near the inner margin and on the outer third as far forward as the extremity of vein 5. The hind wing is tailed at the extremity of the first and second median nervules (veins 2 and 4). The outer border is broadly black, each interspace ornamented with a more or less oval white submarginal spot, except at the inner angle, where there are two such spots in the interspace between the extremities of the inner vein and the first median nervule. At the end of veins 2 to 6 on either side are subtriangular small white spots, which at the end of veins 2 and 4 are continued outwardly upon the tails, which, as also the entire outer border of the wing, are narrowly margined with black. A few blue scales form a faint lunule over the small white spot which is the innermost of the two nearest the anal angle. *Under side of the wings:* The markings of the upper side are for the most part repeated on the under side, with the following differences: the fore wings at the base are deep ochre-yellow, in the cell there are a number of deep black spots, one immediately at the base, coalescing with another just beyond it projecting inwardly from the costa, opposite the latter spot on the lower margin of the cell is a small round spot, at the middle of the cell are two conspicuous somewhat oval spots tending to coalesce with each other, at the end of the cell is a large irregular spot suggesting the rude outline of a comma, in the head of which is a small quadrangular spot of pale yellow, beyond the cell on vein 2, just beyond its origin, is a small black spot, about a millimeter in diameter, which stands forth conspicuously upon the white ground of this part of the wing. Near the base of the hind wing are six narrow black streaks conforming at their extremities in their course to the neuriation of this part of the wing, but crossing the cell; the outer

border has the same maculation as the upper side, but the submarginal white spots on the lower side are distinctly ringed about with black, each ring being surmounted inwardly by a narrow pale green lunule, which is again bordered on the side of the base of the wing with a fine black line. Expanse, as spread, 90 mm. The type, which is thus far unique, was taken by the Rev. Albert I. Good at Lolodorf, Cameroon, August 12, 1910, and is in the Carnegie Museum.

The only species of *Charaxes* of which this insect might seem to be the female is *C. nobilis* Druce, but the female of this species is said by Aurivillius (*cf.* Seitz, *Die Grossschmetterlinge des Afrikanischen Faungebietes*, p. 137) to be known, and his scanty description of it (*l. c.*) fails to remotely indicate a resemblance to this form. It is not the female of *C. hadrianus* Ward, as I have specimens of the female of that species, which do not differ greatly in their markings from the male.